UNITED STATES PATENT AND TRADEMARK OFFICE

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09/870,418	05/30/2001	Michael K. Blackwell	C1104.70001US00	8017

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WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER
SHECHTMAN, SEAN P

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/870,418	BLACKWELL ET AL.
	Examiner	**Art Unit**	
	Sean P. Shechtman	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 April 2007*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

    4a) Of the above claim(s) *4,32,41 and 63-67* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,2,5,6,8,11-13,17-20,30,33,36,37,42,45-50,54,55,57,60,61,85 and 86* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *29 April 2002* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/25/07;1/29/07*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☒ Other: *IDS filed 11/3/06*.

Continuation of Disposition of Claims: Claims pending in the application are 1,2,5,6,8,11-13,17-20,30,33,36,37,42,45-50,54,55,57,60,61,85 and 86.

DETAILED ACTION

Election/Restrictions

1.   Applicant's election without traverse of claims 1,2,5,6,8,11-13,17-20,30,33,36,37,42,45-

50,54,55,57,60, 61, 85, 86 in the reply filed on 4/12/07 is acknowledged.

Drawings

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, the second device that is not coupled

to the first device must be shown or the feature(s) canceled from the claim(s). No new matter

should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment

of the application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being amended.

The figure or figure number of an amended drawing should not be labeled as "amended." If a

drawing figure is to be canceled, the appropriate figure must be removed from the replacement

sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the drawings for consistency. Additional

replacement sheets may be necessary to show the renumbering of the remaining figures. The

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted

by the examiner, the applicant will be notified and informed of any required corrective action in

the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,2,5,6,8,11-13,17-20,30,33,36,37,42,45-50,54,55,57,60, 61, 85, 86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.   The term "directly" in claim 1, 30, 37 is a relative term which renders the claim indefinite. The term "directly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The final data stream has been rendered indefinite by the use of the term directly.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4.   Claims 1,2,5,6,8,11-13,17-20,30,33,36,37,42,45-50,54,55,57,60, 61, 85, 86, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,406,176 to Sugden (hereinafter referred to as Sugden), supplied by applicant.

Referring to claims 1, 30, 37, 85, 86, Sugden teaches a method, system, apparatus, computer readable medium for executing a lighting program to control a plurality of lights, the lighting program defining a sequence of states for the plurality of lights (whole document, especially Col. 2, lines 38-54), comprising: transferring the lighting program from a first device on which the lighting program was create (Col. 3, lines 30-49, desktop personal computer) to a computer readable medium and storing the lighting program on the computer readable medium

(Col. 3, lines 30-49, download show data files to lamp units RAM memory, via RS232), the

lighting program being transferred in a data format having a plurality of frames (Col. 3, lines 15-

29, data file recording all the cue parameters of each lamp unit for all cues required of a

production), each one of the plurality of frames corresponding to a state in the sequence of states

for the plurality of lights (Col. 3, lines 15-29, light parameters for each cue), and the lighting

program being stored by storing a specific frame for each of the states (Col. 3, lines 30-49,

download show data files to lamp units RAM memory, Col. 3, lines 15-29, data file recording all

the cue parameters of each lamp unit for all cues required of a production), the data format

representing a final data stream capable of directly controlling the plurality of lights (Col. 3, lines

7-14; Col. 8, line 51-); coupling the computer readable medium to a second device that is not

coupled to the first device (Col. 3, lines 54-56, the backup system with the second PC must be

connected in place of the first PC if the first PC fails see fig. 1, element 16); coupling the second

device to the plurality of lights (Col. 3, lines 54-56, the backup system with the second PC must

be connected in place of the first PC if the first PC fails see fig. 1, element 16); and executing the

lighting program on the second device by reading the plurality of frames from the computer

readable medium and passing the final data stream to the plurality of lights to control the

plurality of lights to execute the sequence (Col. 3, lines 7-14). Since Sugden clearly teaches that

the stored cue data is executed, the data files must contain some instructions or code to be

executed and therefore are interpreted as program files (Col. 3, lines 7-14).

Referring to claims 2, 5, 6, 8, 11-13, 17-20, 42, 45-50, 54, 55, Sugden teaches a computer

readable medium encoded with a lighting program that, when executed, controls a plurality of

lights and defines a plurality of states for the plurality of lights, the lighting program being

encoded in a data format that represents a final data stream capable of directly controlling the

plurality of lights, transferring the programs via a communications channel between various

computers and mediums and switching scenes and transition times and effects (Col. 3, lines 50-

53; Col. 1, lines 11-34). 9. The method of claim 5, further including an act of, during execution

of the first lighting program in act (D), switching to execution of the second lighting program in

act (F) in response to an input received from a user at the second device. 10. The method of

claim 5, further including an act of, during execution of the first lighting program in act (D),

switching to execution of the second lighting program in act (F) in response to an input received

at the second device from a sensor. 14. The method of claim 1, further including an act of,

during execution of the first lighting program in act (D), changing a speed at which the lighting

program is executed from a programmed speed to a new speed in response to a sensor input

received at the second device. 15. The method of claim 1, further including an act of, during

execution of the first lighting program in act (D), changing an effect assigned in the lighting

program to at least one of the plurality of lights from a programmed effect to a new effect in

response to a sensor input received at the second device. 16. The method of claim 1, further

including an act of, during execution of the first lighting program in act (D), changing a

parameter of at least one effect assigned, in the lighting program, to at least one of the plurality

of lights from a programmed parameter to a new parameter in response to a sensor input received

at the second device.21. The method of claim 1, further including an act of, during execution of

the lighting program in act (D), changing an effect assigned in the lighting program to at least

one of the plurality of lights from a programmed effect to a new effect in response to a timing

device coupled to the second device (Col. 2, lines 38-54). 22-27. The method of claim 1, further

including an act of, during execution of the lighting program in act (D), changing a parameter of an effect assigned in the lighting program to at least one of the plurality of lights from a programmed effect to a new effect in response to a timing device disposed within the second device; changing a speed at which the lighting program is executed from a programmed speed to a new speed in response to a timing device coupled/disposed to the second device (Col. 5, lines 33-49); 27-29. The method of claim 1, wherein the second device is coupled to a cue table that identifies various actions to be taken during execution of the lighting program in response to at least two inputs received at the cue table, and wherein the method further includes an act of, during execution of the lighting program in act (D), changing a speed at which the lighting program is executed from a programmed speed to a new speed in response to an output of the cue table (Col. 1, lines 12-24; Col. 3, lines 15-29). Referring to claim 33, Sugden teaches the computer readable medium of claim 30, wherein the lighting program is a first lighting program, and wherein the computer readable medium is further encoded with a second lighting program that, when executed, controls the plurality of lights (Col. 3, lines 1-14, each lamp units). 35. The computer readable medium of claim 30, wherein the lighting program includes at least one variable that, at execution time, is to be provided by a device to which the computer readable medium is coupled (Col. 3, lines 7-14). Referring to claim 36, Sugden teaches the computer readable medium of claim 30, wherein the lighting program includes data to control at least one non-light device in addition to the plurality of lights (Col. 4, lines 4-8). 38. The apparatus of claim 37, further including an input port, coupled to the at least one storage medium, to enable the lighting program to be loaded into the at least one storage medium from another device while the at least one storage medium is disposed in the apparatus (Col. 3, lines 30-49).43. The

apparatus of claim 42, further including a user interface that enables selection between the first and second lighting programs for execution (Col. 5, lines 16-19). 51-53, 56. The apparatus of claim 39, in combination with a sensor, wherein the apparatus further includes at least one input coupled to the sensor to receive information concerning an external environment, and wherein, during execution of the lighting program, the controller automatically, without user intervention, changes a speed at which the lighting program is executed from a programmed speed to a new speed in response to the received information; further including at least one timer that is coupled to the at least one controller so that the at least one controller can alter execution the lighting program based on the timer (Col. 2, lines 38-54). Referring to claims 57, 60, 61, Sugden teaches the second device is coupled to a cue table that identifies various actions to be taken during execution of the lighting program in response to at least two inputs received at the cue table (Col. 3, lines 15-29); wherein the at least one controller, during execution of the lighting program, changes a parameter of at least one effect assigned, in the lighting program, to at least one of the plurality of lights from a programmed parameter to a new parameter in response to the output of the cue table; wherein the at least one controller, during execution of the lighting program, changes an effect assigned in the lighting program to at least one of the plurality of lights from a programmed effect to a new effect in response to the output of the cue table (Col. 3, lines 56-58).

5.   Claims 30, 33, 36, 37, 42, 43, 45-50, 54, 55, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,466,234 to Pyle (Supplied by applicant).

Referring to claims 30, 37, Pyle teaches a method, system, apparatus, computer readable medium for executing a lighting program to control a plurality of lights, the lighting program

defining a sequence of states for the plurality of lights (Whole Document), comprising:

transferring the lighting program from a device on which the lighting program was created to a

computer readable medium and storing the lighting program on the computer readable medium,

the lighting program being transferred in a data format having a plurality of frames (See Fig. 6,

Col. 5, lines 46 – Col. 6, lines 39), each one of the plurality of frames corresponding to a state in

the sequence of states for the plurality of lights, and the lighting program being stored by storing

a specific frame for each of the states, the data format representing a final data stream capable of

directly controlling the plurality of lights (Col. 4, lines 10-29); coupling the computer readable

medium to a device; coupling the device to the plurality of lights (See Fig. 6, Col. 5, lines 46 –

Col. 6, lines 39); and executing the lighting program on the device by reading the plurality of

frames from the computer readable medium and passing the final data stream represented by the

plurality of frames to the plurality of lights to control the plurality of lights to execute the

sequence (Col. 4, lines 10-29).

Referring to claims 42, 45-50, 54, 55, Pyle teaches a computer readable medium encoded

with a lighting program that, when executed, controls a plurality of lights and defines a plurality

of states for the plurality of lights, the lighting program being encoded in a data format that

represents a final data stream capable of directly controlling the plurality of lights, transferring

the programs via a communications channel between various computers and mediums and

switching scenes and transition times and effects (Col. 5, lines 14-45). Referring to claim 33,

Pyle teaches the computer readable medium of claim 30, wherein the lighting program is a first

lighting program, and wherein the computer readable medium is further encoded with a second

lighting program that, when executed, controls the plurality of lights (Col. 5, lines 46- Col. 6,

line 38). Referring to claim 36, Pyle teaches the computer readable medium of claim 30,

wherein the lighting program includes data to control at least one non-light device in addition to

the plurality of lights (Col. 1, lines 40-41). 43. The apparatus of claim 42, further including a

user interface that enables selection between the first and second lighting programs for execution

(Col. 4, lines 10-29).

6.   Claims 30, 33, 36, 37, 42, 43, 45-50, 54, 55, rejected under 35 U.S.C. 102(e) as being

anticipated by U.S. Pat. No. 5,945,993 to Fleischmann (Supplied by applicant).

          Referring to claims 30, 37, Fleischmann teaches a method, system, apparatus, computer

readable medium for executing a lighting program to control a plurality of lights, the lighting

program defining a sequence of states for the plurality of lights (Whole Document), comprising:

transferring the lighting program from a device on which the lighting program was created to a

computer readable medium and storing the lighting program on the computer readable medium,

the lighting program being transferred in a data format having a plurality of frames (Col. 3, lines

7-50), each one of the plurality of frames corresponding to a state in the sequence of states for

the plurality of lights, and the lighting program being stored by storing a specific frame for each

of the states, the data format representing a final data stream capable of directly controlling the

plurality of lights (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30);

coupling the computer readable medium to a device; coupling the device to the plurality of lights

(See Fig. 1; Col. 2, line 61 – Col. 3, line 6); and executing the lighting program on the device by

reading the plurality of frames from the computer readable medium and passing the final data

stream represented by the plurality of frames to the plurality of lights to control the plurality of

lights to execute the sequence (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30).

Referring to claims 42, 45-50, 54, 55, Fleischmann teaches a computer readable medium encoded with a lighting program that, when executed, controls a plurality of lights and defines a plurality of states for the plurality of lights, the lighting program being encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30), transferring the programs via a communications channel between various computers and mediums and switching lighting (Col. 2, lines 50-60). Referring to claim 33, Fleischmann teaches the computer readable medium of claim 30, wherein the lighting program is a first lighting program, and wherein the computer readable medium is further encoded with a second lighting program that, when executed, controls the plurality of lights (Col. 4, lines 53-67; Fig. 2). Referring to claim 36, Fleischmann teaches the computer readable medium of claim 30, wherein the lighting program includes data to control at least one non-light device in addition to the plurality of lights (Col. 11, lines 18-23). 43. The apparatus of claim 42, further including a user interface that enables selection between the first and second lighting programs for execution (Col. 4, lines 33-52; Col. 5, lines 24-30).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7.   Claim 57-61, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 5,945,993 to Fleischmann or U.S. Pat. No. 6,466,234 to Pyle as applied to the claims above, and further in view of U.S. Pat. No. 5,769,527 to Taylor.

Referring to claims 57-61, Fleishmann and Pyle teaches all of the limitation disclosed

above, however, fails to teach the second device is coupled to a cue table that identifies various

actions to be taken during execution of the lighting program in response to at least two inputs

received at the cue table; wherein the at least one controller, during execution of the lighting

program, changes a parameter of at least one effect assigned, in the lighting program, to at least

one of the plurality of lights from a programmed parameter to a new parameter in response to the

output of the cue table; wherein the at least one controller, during execution of the lighting

program, changes an effect assigned in the lighting program to at least one of the plurality of

lights from a programmed effect to a new effect in response to the output of the cue table.

However, referring to claims 57-61, Taylor teaches analogous art, lighting control

systems, wherein the second device is coupled to a cue table that identifies various actions to be

taken during execution of the lighting program in response to at least two inputs received at the

cue table (Col. 5, lines 36 – Col. 6, line 17); wherein the at least one controller, during execution

of the lighting program, changes a parameter of at least one effect assigned, in the lighting

program, to at least one of the plurality of lights from a programmed parameter to a new

parameter in response to the output of the cue table; wherein the at least one controller, during

execution of the lighting program, changes an effect assigned in the lighting program to at least

one of the plurality of lights from a programmed effect to a new effect in response to the output

of the cue table (Col. 5, lines 51-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the teachings of Fleischmann or Pyle with the teachings of Taylor.

One of ordinary skill in the art would have been motivated to combine these references because

Taylor teaches lighting systems having intelligent remote lighting fixtures and intelligent

distribution networks (Col. 1, lines 26-30) that can coordinate communications between control

devices and lamp units having diverse communications protocols, functions, and data formats

(Col. 2, lines 5-24).

Response to Arguments

8.   Applicant's arguments filed 4/12/07 have been fully considered but they are not

persuasive.

Applicant argues that Fleischman fails to teach a lighting program encoded in a data

format that represents a final data stream capable of directly controlling the plurality of lights.

The examiner respectfully disagrees. Fleischman teaches the web browser creates and displays

the lighting control form that is clicked on and causes the lights to turn off, 1/3 intensity, etc

(Col. 4, lines 33-52; Col. 5, lines 24-30). The examiner respectfully submits that the web

browser that creates and displays the lighting control form that is clicked on and causes the lights

to turn off, 1/3 intensity, etc, is a lighting program encoded in a data format that represents a

final data stream capable of directly controlling the plurality of lights.

Applicant argues that Fleishman fails to teach a lighting program encoded in a data

format having a plurality of frames. The examiner respectfully disagrees. Fleishman teaches the

different zones of the floor plan of the lighting control form of the web browser (Col. 5, lines 24-

30). The examiner respectfully submits that the different zones of the floor plan of the lighting

control form of the web browser is a lighting program encoded in a data format having a

plurality of frames.

Applicant argues that Pyle fails to teach a lighting program encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights. The examiner respectfully disagrees. Pyle teaches a user interface, as part of a lighting system implemented in software (Col. 5, lines 46-65), which causes lights to be set to a state (Col. 4, lines 10-29). The examiner respectfully submits that the user interface, as part of a lighting system implemented in software, which causes lights to be set to a state is a lighting program encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights.

Applicant argues that Pyle fails to teach a lighting program encoded in a data format having a plurality of frames. The examiner respectfully disagrees. Pyle teaches a scroll bar for setting the brightness level (Col. 4, lines 20-29) and a function that loops selecting each circuit in the scene to put the circuit in its target state (Col. 7, lines 42-59). The examiner respectfully submits that either of a scroll bar for setting the brightness level or a function that loops selecting each circuit in the scene to put the circuit in its target state, is a lighting program encoded in a data format having a plurality of frames.

9.   Applicant's arguments with respect to claims 1, 85, 86 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPS

Sean P. Shechtman

July 6, 2007